

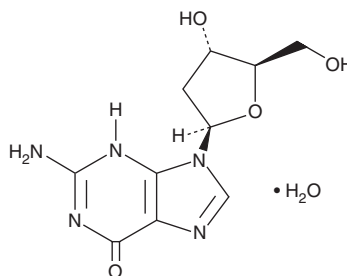
PRODUCT INFORMATION



2'-Deoxyguanosine (hydrate)

Item No. 9002864

CAS Registry No.: 312693-72-4
Formal Name: 2'-deoxy-guanosine, monohydrate
Synonym: Guanine deoxyriboside
MF: $C_{10}H_{13}N_5O_4 \cdot H_2O$
FW: 285.3
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 252 nm
Supplied as: A solid
Storage: $-20^\circ C$
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

2'-Deoxyguanosine (hydrate) is supplied as a solid. A stock solution may be made by dissolving the 2'-deoxyguanosine (hydrate) in the solvent of choice, which should be purged with an inert gas. 2'-Deoxyguanosine (hydrate) is soluble in the organic solvent DMSO at a concentration of approximately 10 mg/ml. 2'-Deoxyguanosine (hydrate) is also soluble in 0.1 M HCl at a concentration of approximately 10 mg/ml.

Description

2'-Deoxyguanosine is a purine nucleoside with diverse biological activities.¹⁻⁴ It inhibits the clonogenic growth of HL-60 and K562 leukemia cells (IC_{50} s = 80 and 100 μM , respectively).¹ 2'-Deoxyguanosine inhibits the growth of MOLT-4 T cells and MGL-8 B cells by 99.8 and 68.3%, respectively, when used at a concentration of 50 μM .² It increases the number of binucleated cells, a marker of inhibited cytokinesis, in *A. sativum* meristems.³ 2'-Deoxyguanosine ($>1 \mu M$) also induces relaxation of precontracted isolated bovine lingual artery.⁴

References

1. Ross, D.D., Akman, S.A., Schrecker, A.W., *et al.* Effects of deoxynucleosides on cultured human leukemia cell growth and deoxynucleotide pools. *Cancer Res.* **41(11 Pt 1)**, 4493-4498 (1981).
2. Mitchell, B.S., Mejias, E., Daddona, P.E., *et al.* Purinogenic immunodeficiency diseases: Selective toxicity of deoxyribonucleosides for T cells. *Proc. Natl. Acad. Sci. USA* **75(10)**, 5011-5014 (1978).
3. Brulfert, A., Clain, E., and Deysson, G. Deoxyguanosine, a potent cytokinesis inhibitor in plant cells. *Experientia* **30(9)**, 1010-1011 (1974).
4. Scholar, E.M. Effect of deoxypurine and deoxypyrimidine compounds on the vascular responsiveness of bovine coronary and lingual arteries. *J. Pharm. Pharmacol.* **32(10)**, 726 (1980).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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